## Standards of care: The EAPCI, guidelines and consensus documents

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The year 2014 will be remembered as an eventful year for our Association.

Apart from numerous educational activities including the active involvement of the EAPCI in the Coronary Microcirculation and Heart Disease Summit in Madrid, the Resistant Hypertension Course in Berlin, EuroPCR in Paris, ESC in Barcelona and PCR London Valves in London, an important new forum for education began with the creation of the Fellows Course in Interventional Cardiology held in July 2014 at the Heart House of the European Society of Cardiology in France and which covered all major aspects of our discipline.

In addition to these meetings, the last few months witnessed a tremendous activity on the part of the EAPCI and sister Associations in providing their members with guidelines and consensus documents addressing important clinical questions relevant to daily practice. In an earlier EAPCI column, we discussed the mechanism our Association has put in place to focus and develop, in the future, these scientific documents of importance to our members. This new committee, the Scientific Documents & Initiatives Committee, is chaired by Marco Valgimigli of the Netherlands and co-chaired by Robert Byrne of Germany. In 2015 we will see new guidelines being published, among them one on "Acute coronary syndromes" chaired by Marco Roffi of Geneva, Switzerland and Carlo Patrono of Rome, Italy.

Two consensus papers and a guidelines paper that were originally the object of online joint publications when they were first released, appear in this current print edition of EuroIntervention. The first, a consensus paper, is on cardiac arrhythmias in acute coronary syndromes and was developed by a task force and partnership with the European Heart Rhythm Association (EHRA), the Acute Cardiovascular Care Association (ACCA), and the EAPCI1. Chaired by Bulent Gorenek of Turkey, this was jointly published with EP-Europace, European Heart Journal - Acute Cardiovascular Care and EuroIntervention and provides important insights into a clinically relevant topic. The second consensus document, chaired by Bernhard Meier of Switzerland for the EAPCI and Michael Glikson of Israel for the EHRA, is on "catheter-based left atrial appendage occlusion" and has been jointly published by EP-Europace, HeartRhythm and EuroIntervention<sup>2</sup>. It provides a focused update on an intervention which is relevant for both interventional cardiologists and electrophysiologists in the treatment of patients with atrial fibrillation who are not candidates for oral anticoagulant therapy. The third of these papers is the 2014 edition of the ESC/EACTS myocardial revascularisation guidelines

published jointly in the European Heart Journal, the European Journal of Cardio-Thoracic Surgery and EuroIntervention<sup>3</sup>.

Also in this edition, we are presenting an editorial by Davide Capodanno, Gregory Y.H. Lip and colleagues, reviewing the recently Editorial, see page 1015

published expert consensus document on the "Management of antithrombotic therapy in atrial fibrillation patients presenting with acute coronary syndromes and/or undergoing percutaneous coronary or valve interventions". This was a joint consensus document of our association along with the European Society of Cardiology Working Group on Thrombosis, the EHRA, the ACCA and was equally endorsed by the Heart Rhythm Society (HRS) and Asia-Pacific Heart Rhythm Society (APHRS). This editorial, besides offering an overview of this document, discusses the most recent trial data which have appeared since its publication<sup>4,5</sup>.

## ESC/EACTS myocardial revascularisation guidelines

The MR Guidelines on myocardial revascularisation in patients with coronary artery disease (CAD) have a broad scope and follow on from the previous ESC/EACTS Guidelines published in 2010. The Task Force performed a systematic review of the evidence, including 100 trials in 93,553 patients with 262,090 patient years in the field of coronary revascularisation. The principal finding was that, among patients with stable CAD, coronary artery bypass grafting (CABG) reduces the risk of death, myocardial infarction and repeat revascularisation compared with medical treatment. It also showed that all stent-based coronary revascularisation technologies, and new-generation drug-eluting stents (DES), were the most effective. Of note, new-generation DES, but no other percutaneous revascularisation technologies, were associated with improved survival compared to medical treatment<sup>6</sup>.

Indications for revascularisation remain generally based on symptomatic and prognostic grounds. For the first time, the Guidelines suggest a timeframe for revascularisation procedures, recommending implementation of revascularisation within two weeks for highly symptomatic patients, with other procedures performed within six weeks. Percutaneous coronary intervention (PCI) now assumes a similar Class and level of evidence as CABG in the treatment of patients with proximal LAD disease (IA), left main disease with a SYNTAX score <22 (IB) and three-vessel disease with a SYNTAX score <22 (IB). However, PCI is generally not recommended in patients at low surgical risk in the presence of complex three-vessel disease with a SYNTAX score >22

\**Corresponding author: Bern University Hospital, 3010 Bern, Switzerland. E-mail: stephan.windecker@insel.ch*  (IIIB) and left main disease with a SYNTAX score >32 (IIIB). Among diabetic patients with multivessel CAD and acceptable surgical risk, CABG has become the favoured revascularisation therapy (IA) based on the results of the FREEDOM trial and recent meta-analyses. In the new Guidelines, DES are favoured over bare metal stents (BMSs) in nearly all patient and lesion subsets. The most notable change is among patients with ST-segment elevation myocardial infarction (STEMI) undergoing primary PCI in whom DESs now assume a Class I indication.

A large focus of these Guidelines as well as an extensive update on antithrombotic therapy following revascularisation constitutes the largest chapter. The duration of dual antiplatelet therapy (DAPT) following DES implantation in patients with stable CAD has been individualised. In general, a duration of six months is recommended. However, among patients with high bleeding risk shorter durations of DAPT (<6 months) may be considered. Similarly, among patients with high ischaemic and low bleeding risk, longer durations of DAPT (<6 months) can be prescribed. These recommendations certainly deserve discussion in view of the recently reported results of the DAPT trial, and Marco Valgimigli and Robert Byrne have been conducting an ongoing survey on this topic that will be reported later in the year.

For the first time, evaluation of different "volume-outcome "relationships for revascularisation from different centres have been assessed, leading to suggestions on the minimal numbers of PCI and CABG procedures for physicians and institutions, as well as recommendations for training to ensure high quality of care.

## **Building practice and experience**

Work on these Guidelines with a multidisciplinary Task Force has further underlined the importance of teamwork involving cardiologists, surgeons and interventionalists, not only concerning revascularisation, but for the advancement of our specialty and care in general. And while these guidelines and consensus documents allow us to conceptualise the result of our joint work across specialties, we should realise that the constant evolution of our knowledge is also of critical importance. As we go to print, newer and more recent evidence becomes available and is evaluated putting into question or affirming what we have published here. The DAPT trial, recently a focus during the last AHA meeting and published in the New England Journal of Medicine (see Prof Serruys's editorial), is a good example of this and reminds us that these documents, while valuable as a synthesis of current knowledge, remain a measure of a specific time and require constant update and reconsideration.

Also, while these documents are undoubtedly valuable, they in no way absolve us from the day-to-day challenge of treating our individual patients. As such, they point to the importance of the concept of personalised medicine, where consensus papers and guidelines can help guide us in our choices and inform our experience, but cannot replace the simple fact that each individual patient should be considered individually. We must remember that one size does not necessarily fit all, and that our experience, and sharing our clinical knowledge as individual practitioners, remains essential. We hope you enjoy reading these documents and find them helpful in guiding your decision making in daily practice.

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